

COMPUTER AIDED DESIGN METHOD AND APPARATUS FOR MODELING AND ANALYZING ON-CHIP INTERCONNECT STRUCTURES

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ABSTRACT OF THE INVENTION

[0031] A computer aided design (CAD) system. A template generation engine generates templates from interconnect configuration files. A field solver generates high frequency passive element relationships from the templates. A circuit builder generates circuit
10 description files from device technology models and from high frequency passive element relationships. Parameterized circuit description models may be generated for large range of sensitivity analyses. A simulator simulates circuit responses for transmission line models from the circuit description files. Interconnect configuration files may be generated by a geometry and material definition module that receives
15 process description data from a designer.